

Improving Public Health in Brownfields Communities

Public Health

rownfields and public health are linked in many respects. Communities may be concerned about public health including threats from potential environmental contamination, crime in or near abandoned or vacant property, and safety hazards on dilapidated properties-all issues that relate to brownfield sites. But in some cases, public health can be improved not only through assessment and cleanup of a brownfield, but through its redevelopment. Redevelopment including recreational or green space creation to encourage physical activity; community gardens and public spaces that encourage interaction, reduce the effects of heat islands, and improve storm water management; and accessible and affordable pharmacies and grocery stores—all ways to improve public health. Public health also can be enhanced when brownfields are reused by the health care sector. In communities where this type of brownfields redevelopment has occurred, the benefits are obvious: in addition to the restoration of blighted, idle land and the removal of contamination, residents now have improved access to health care, new jobs, and local economic engines that leverage additional improvements and enhance quality of life.

The Brownfields Law also provides local government brownfield communities with an opportunity to link brownfields and public health – through the provision that allows a local government to spend up to 10% of their grant to conduct monitoring the health of populations near brownfields sites that may be exposed to hazardous substances. This provision provides new opportunities for partnerships with local, state, tribal and federal health agencies and community and private sector efforts to assess, clean and revitalize brownfields, while also advancing efforts to improve public health at the community level.

Health Monitoring

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The completed Portland-Providence Health Services Facility in Portland, Oregon.

JUST THE FACTS:

- In their application, the City of Portland, Maine proposed using 10 percent of their EPA Brownfields Assessment grant for health monitoring activities. The grant was awarded in 2005.
- The designated portion of Portland's EPA grant funded lead screenings for 180 children (with the results easing community concerns about lead paint exposure), as well as an asthma surveillance study to identify areas of the city with higher incidence rates.
- The cities of St. Petersburg, Florida; Clearwater, Florida; Portland, Oregon; and Long Beach, California have all seen once-idle brownfields reused as health care centers that serve critical community needs.

In communities where brownfields are reused for public health facilities, the benefits are obvious: in addition to the restoration of blighted, idle land and the removal of contamination, residents enjoy improved access to health care, new jobs, and local economic engines that leverage additional improvements and enhance the local quality of life. planning office worked with city health officials to see how this funding could enhance their collaboration and examined the extent of community health issues in brownfield site areas. The city already had programs in place to study the impact of lead paint in older construction, as well as community asthma levels, and decided to extend both of these projects in the brownfields areas using funds from the designated portion of the Brownfields grant.

The city's Brownfields grant-funded health monitoring activities included lead screenings for children at more than 30 local childcare facilities. This project was initiated by mailing informational packets to area daycare providers and inviting them to participate. Over the course of the study, 180 children were screened, revealing only a small percentage of elevated samples—none at levels that warranted further investigation. The project provided peace of mind to Portland's residents by offering a more accurate picture of the risks of lead poisoning within the community.

The grant was also used to fund a detailed asthma surveillance study, in which six school-based health centers tracked students with asthma and mapped their residences to determine if any geographic areas contributed to elevated asthma reports. The study identified more than 170 children with asthma, and plotted logistical information on a GIS map to provide the most accurate results.

In addition to designated Brownfields grant funds, support for Portland's health monitoring initiative came in the form of donated time from city employees including administrative, health, and cartographic professionals. Lisa Belanger, Program Manager for the city's Health & Human Services Department, indicated that the health-related portion of EPA Brownfields grant "furthered our knowledge of the health of the community." For

communities considering similar uses of EPA Brownfields Assessment grants, Lisa recommends sharing their Request for Proposals with public health officials to make them aware of the grant and potential partnership opportunities.

The experience of Portland, Maine serves as a useful example for other communities seeking a new vision as part of their brownfield redevelopment. One such community is the City of Guin. Guin is a community of approximately 2,400 residents located in Marion County in Northwest Alabama. In 1974, a level 5 tornado destroyed a significant portion of the city and some businesses did not reopen, leaving close to 75% of the population unemployed. While 3M remains a major employer in town, the redevelopment of an old garment manufacturing plant site—the focus of a current brownfield assessment grant—will help create a new downtown for Guin.

Revitalizing this site is part of Mayor Seagraves' vision to create a downtown magnet for residents and visitors alike, connecting destination sites such as an existing water park, schools and neighborhoods, through a series of walking trails along a stream named Purgatory Creek and its tributaries. This vision resulted from Mayor Segraves and City Engineer Burt Hankins, asking a question that has guided the

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A map of the Portland, Maine Brownfields Asthma Surveillance Study.

EPA-560-F-07-253 January 2008 www.epa.gov/brownfields/ health assessment planning: *Of various mixed-use alternatives, what is the optimal use of the brownfields site to maximize the health of the community?* To help make this vision a reality, the city has enlisted the help of Dr. Patrick McNees, faculty with the University of Alabama Birmingham, to define the connection between community health and redevelopment. This connection suggests that public health can be improved even as economic development takes place, all through the cleanup and reuse of brownfields.

Brownfields Reused as Public Health Facilities

In 2000, the City of Portland, Oregon entered into an agreement with the Tri-County Metropolitan Transportation District (TriMet) to use EPA Brownfields Assessment grant funds to conduct assessments and develop a brownfields inventory in preparation for a new light rail route along North Interstate Avenue. Through this agreement, the city managed the work under TriMet's EPA grant to provide assessments and technical assistance on properties within a quarter-mile radius of the proposed light rail stations. The survey identified a vacant, former service station along the new alignment route, a site that had been idle for years due to contamination concerns.

The site's owner, who had received the property through inheritance, expressed willingness to work with the city in assessing and marketing the property for reuse. TriMet's EPA Brownfields grant was used to conduct Phase I and II assessments of the site, which were completed in 2002 and surprisingly, indicated that no cleanup was necessary—allowing the owner to put the property up for sale.

The neighborhood surrounding the property had long been recognized by Providence Health & Services (a multi-state network of hospitals and health-care facilities) as underserved for health

(a multi-state network of hospitals and health-care facilities) as underserved for health care, and the site's location along the proposed light rail route made it especially



The completed Johnnie Ruth Clarke Health Center in St. Petersburg, Florida.

attractive for the location of a new health care facility. The company purchased the property in January 2006 and finished development of their new, 19,000square-foot health facility in March 2007. The community has expressed gratitude and appreciation to staff of the new facility, which provides general health care to a steady stream of patients.

Construction of the relocated Johnnie Ruth Clarke Health Center facility began in 2003, funded with a \$3.75 million U.S. Department of Health and Human Services grant and \$463,000 in U.S. Housing and Urban Development (HUD) Community Development Block Grant (CDBG) funds. Development included preservation of the original 1923 historic building, and a new museum of the history

of African-American medicine in Pinellas County. Opening its doors in 2004, the facility is a state-of-the art, federally-qualified health care center that created more than 100 jobs and serves up to 300 patients a day. Florida A&M University offers a pharmacy program and training center at the facility, and the University of Florida offers a Dentistry program onsite. In addition to providing affordable and accessible health care and health-related education, the facility has catalyzed additional

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EPA-560-F-07-253 January 2008 www.epa.gov/brownfields/ economic development in the area—including a Boys & Girls Club Performing Art Center at the historic Royal Theatre; restoration of the historic Manhattan Casino; and the new Tangerine Plaza, which offers retail and grocery shopping. In addition, the city is working with a developer on an affordable housing project that will likely be located on a vacant property in the vicinity of the Community Health Center.

Less than 20 miles northwest, in the City of Clearwater, the site of an abandoned gas station became a free health clinic for residents of the city's North Greenwood community. The property was deemed as the perfect place to relocate the Greenwood Community Health Resource Center due to its central community location. The city purchased and had earlier performed environmental assessments and cleanup on the site, which was located within the City of Clearwater's EPA Brownfields Pilot target area, using EPA and state Brownfields Program funds. As part of cleanup, four underground storage tanks and 450 tons of contaminated soil were removed

from the property. Representatives of North Greenwood voted unanimously for the city to lease the property to the nonprofit clinic—

which founder Willa Carson had been



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The Willa Carson Health Resource Center in Clearwater, Florida.

operating out of two refurbished apartments—for 30 years at \$1 a year. Opened in January 2001, the 3,200-square-foot Willa Carson Health Resource Center provides free health care, mostly to residents of surrounding communities, and is operated solely on donations and grant funding with the help of a volunteer workforce. The clinic has four examination rooms, a reception area, and a community room for educational sessions about lead screening, breast cancer detection, nutrition and managing diabetes, and other health-related topics.

Given the nature of brownfields, and the economic status of the communities that typically surround them, reuse of these sites for health care facilities often fulfills critical needs and offers greatly improved medical access for local residents. The examples described above suggest an emerging trend in brownfields redevelopment, one being applied in other cities nationwide. In Long Beach, California, the Miller Children's Hospital received \$600,000 in EPA Brownfields Cleanup grants to remove petroleum and other contaminants from adjacent property formerly used as a dumping ground. This cleanup is allowing the hospital to create a new, four-story wing on the former brownfield that will include a pediatric imaging center, a neonatal intensive care unit, pediatric beds, and operating rooms—serving a predominantly Hispanic/African-American community in which roughly a third of the children live in poverty. Cleanup and health-industry reuse of brownfields in communities such as these protects residents from the blighted sites themselves, and provides new health-care options for those who might previously have had few available.

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